

TO: Myla Kelly
FROM: Kevin B. Smith
Copy: Mike Abrahamson
Mike Suplee
DATE: August 13, 2019

SUBJECT: HAC Compliance Schedule

Myla,

Mike Abrahamson (WPCSRF Supervisor) and I discussed your inquiry concerning an appropriate timeline for communities to implement major modifications to treatment facilities to meet HAC. For reference, major modifications can include rehabilitation of existing facilities; upgrades to provide additional capacity and / or effluent quality; or full removal and replacement. Please note that any major infrastructure project that relies on public funding programs are tied to those programs timelines and submittal requirements.

Typically, it will take between six to eight years to complete a project. This timeline is a feature of our biennial legislative cycle as funding is typically tied to the same two-year cycle. The following assumes public funding and is an abbreviated breakdown of typical milestones in a project's life.

- Advertise for and hire qualified consulting firm. Work provided by firm should result in an engineering report that outlines a preferred alternative to meet the communities current and future needs. This process, from initial scoping by the community, hiring a consultant, conducting constituent outreach, and having the work completed often takes up to a year to complete.
- Seek grant funding from the Renewable Resource Grant and Loan Program (RRGL – Under the Department of Natural Resources) and the Treasure State Endowment Program (TSEP – Under the Department of Commerce). Both programs rank and prioritize projects for final approval by the legislature. Grant packages are due early spring of even numbered years for award (if successful) in July of odd numbered years. Depending on when a community begins their process, this action can delay a project by two years if application dates are missed.

- Assuming funding is in place, whether through increased fees, grants, loans, or more likely a combination of all sources, final design is completed and reviewed. After acceptance, final construction documents are prepared for bidding and contractor award. The time to conduct full design is dependent on the complexity of the project. Normally, this process will take up to a year to complete.
- Assuming a large project that goes out to bid fall / winter to allow for spring and summer construction, at a minimum, from the bidding phase to final completion, the project will likely take the full year, if not longer.
- After project completion, system operators, owners, and the designers will take up to a year to operate and optimize the new facility.
- Should construction quality, new equipment, etc., result in warranty issues, there may be additional delays in optimizing performance.

A 5-year completion cycle assumes there are no delays encountered at any point in the process. As described, missing one date for grant applications has the potential to add 2-years to the process. In addition, reasonable planning efforts would include an additional year to account for unanticipated construction change orders, long lead times for major equipment purchases, weather delays, design approvals, etc.

To recap the discussion above, if a community is relying on public funding assistance, an expediated design and construction package could be accomplished within 5 years, ***assuming no issues or problems occur***. Realistically, infrastructure projects will typically take longer. It is not unreasonable to expect a project to take eight years.

As an aside, I've been informed that of the four facilities currently not meeting HAC, the site at Manhattan will likely require substantial effort to come into compliance. This is the type of project that will require significant public support and financing to move forward in a process as described above. Note that if there is a shortfall of public grant funding, smaller communities will likely delay work to build up reserves to cover shortfalls, potentially adding years to any meaningful actions.

For illustrative purposes, the following scenario is a path that the Manhattan community might follow to conduct a major rehabilitation or civil infrastructure project. This draft schedule outlines a possible path to have a treatment plant operational in five years, with an additional year taken to account for operational and optimization issues. Please note that this schedule does not allow for delays or funding shortfalls. Also, I assumed that actual construction efforts will take six to eight months to complete, barring weather delays or unknown site conditions. I also did not include any timeline discussing permitting efforts. For permitting, I assumed that those efforts would run concurrently and be completed prior to the fall of 2021.

- Fall 2019: Select Consulting Firm to conduct a Preliminary Engineering Report to outline possible options identifying preferred alternatives.

- May 2020: Meet the grant and loan application deadlines for Montana State Legislative Biennial cycle. The Preliminary Engineering Report is a critical supporting document of any application. Applications are then evaluated, ranked, and submitted to the next legislative session.
- May through December 2020: Ongoing public outreach by local government. Continued efforts identifying and obtaining additional revenue sources for project needs.
- January through April 2021: Legislative actions to evaluate, rank, and fund infrastructure projects. Funding typically is a competitive process to obtain a limited amount of available funds.
- July through September 2021: Conduct the Request for Qualification / Request for Proposal process to select consulting firm. Since the state fiscal year begins July 1, funding authorized during the legislative session takes effect after that date.
- Fall 2021 through Winter 2022: Consultant completes final design and project specifications. This process is typically broken into phases such as 35%, 70% and 95% completion to allow project reviews with associated project cost estimates.
- Spring through Summer 2022: Montana DEQ review and approval. Actual timeline to accomplish this effort is dependent on staff existing workload and the completeness of the submitted plans and specifications.
- October 2022: Advertise Project for Bid.
- January 2023: Issue Notice of Award to successful bidder. This allows Contractor to properly schedule crews and identify project components that have long lead times for manufacture and delivery.
- April or May 2023: Issue Notice to Proceed to Contractor.
- December 2023: Contractor receives Substantial Completion (barring weather delays, long lead times for component deliveries, etc.).
- April / May 2024: Contractor receives Final Completion for Construction Contract. This allows site clean-up activities, reclamation efforts, and any other work that may be difficult or impractical to complete during winter months.
- Late Spring 2025: One full year of plant operations to evaluate performance and optimization efforts.

As seen in this estimated timeline, if funding is not obtained through the 2021 Legislative Session, the project will be delayed 2-years if State funding is required.

Please let us know if we can provide any other assistance.